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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,264	07/14/2003	Robert J. Woodruff	ITL.1002 (P16574)	7053

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EXAMINER	
TARANINA, MARINA Y	

ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,264	WOODRUFF ET AL.	
	Examiner	Art Unit	
	Marina Taranina	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 jul 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4-8, 10-15, 17-21, 23-26 and 28-30 are rejected under 35 U.S.C.102 (b) as being anticipated by Chow et al. (US 6,075,251).

(1) With respect to Claim 1, Chow discloses a method comprising:

providing a signal (output of 70 in fig. 6) to a communication link (88 in fig. 6, col. 8 line 3) to communicate a data value (col. 14 lines 53-55) across the communication link (88 in fig. 6);

and selectively introducing at least one wavelength to the signal (col. 7 lines 42-47), said at least one wavelength identifying the data value (bits, col. 7 lines 39-41, col. 12 lines 25-26, 36-38).

(2) With respect to Claim 2, Chow discloses the method of claim 1, wherein the presence of said at least one wavelength (col. 7 lines 42-47) in the signal identifies the data value (bit state, col. 12 lines 36-38).

(3) With respect to Claim 4, Chow discloses the method of claim 1, wherein said introducing comprises: introducing a wavelength (wavelet) identifying a bit state (col. 12 lines 36-38).

(4) With respect to Claim 5, Chow discloses the method of claim 1, wherein said introducing comprises: introducing wavelengths (wavelets) identifying different bit states of a digital value (bit state 1 and bit state 0, col. 12 lines 36-38).

(5) With respect to Claim 6, Chow discloses the method of claim 5, wherein the digital value comprises a nibble (col. 12 lines 17-20, 25-26, 28-29).

(6) With respect to Claim 7, Chow discloses the method of claim 1, wherein the providing comprises: providing the signal (output of 70 in fig. 6) to an optical fiber (88 in fig. 6, col. 8 line 3).

(7) With respect to Claim 8, Chow discloses a method comprising: receiving a signal (input of 30 in fig. 6) from a communication link (88 in fig. 6), the communication link to communicate a data value (col. 14 lines 53-55, col. 16 lines 4-8); and detecting (32 and 34 in fig. 6 and 11B) the presence of at least one wavelength in the signal to identify the data value (col. 7 lines 37-47, col. 15 lines 65-67, col. 16 lines 1-3).

(8) With respect to Claim 10, Chow discloses the method of claim 8, wherein the detecting comprises: detecting a wavelength identifying a bit state (col. 12 lines 36-38, col. 15 lines 65-67, col. 16 lines 1-3).

(9) With respect to Claim 11, Chow discloses the method of claim 8, wherein the detecting comprises: detecting wavelengths identifying different bit states of a digital value (bit state 1 and bit state 0, col. 12 lines 36-38).

(10) With respect to Claim 12, Chow discloses the method of claim 11, wherein the digital value comprises a nibble (col. 12 lines 17-20, 25-26, 28-29).

(11) With respect to Claim 13, Chow discloses the method of claim 8, wherein the receiving comprises: receiving the signal from an optical fiber (88 in fig. 6, col. 8 line 3).

(12) With respect to Claim 14, Chow discloses the method of claim 8, wherein the receiving comprises: receiving the signal from an optical communication link (88 in fig. 6, col. 8 line 3).

(13) With respect to Claim 15, Chow discloses a receiver (30 and 86 in fig. 6, 86 in fig. 11B) comprising:

at least one detector (32 and 34 in fig. 6 and 11B) coupled to a communication link (88 in fig. 6) to detect the presence of at least one wavelength (col. 7 lines 42-47, col. 8 lines 4-9) in a signal received from the communication link (88 in fig. 6) to identify data (col. 15 lines 65-67, col. 16 lines 4-8) communicated over the communication link (88 in fig. 6).

(14) With respect to Claim 17, Chow discloses the receiver of claim 15, wherein said at least one wavelength comprises a wavelength identifying a bit state (col. 12 lines 36-38, col. 15 lines 65-67, col. 16 lines 1-3).

(15) With respect to Claim 18, Chow discloses the receiver of claim 15, wherein said at least one detector (32 and 34 in fig. 6 and 11B) receives the signal from an optical fiber (88 in fig. 6, col. 8 line 3).

(16) With respect to Claim 19, Chow discloses the receiver of claim 15, wherein said at least one detector comprises: multiple detectors (32 and 34 in fig. 11B), each detector to detect the presence of a different wavelength in the signal (col. 7 lines 42-47, col. 8 lines 4-9).

(17) With respect to Claim 20, Chow discloses a transmitter (70 and 72 in fig. 6, 72 in fig. 11A) comprising:

at least one source (44 and 46 in fig. 6 and fig. 11A) to provide a signal (output of 70 in fig. 6) to a communication link (88 in fig. 6, col. 8 line 3) to communicate a data value (col. 14 lines 53-55) and selectively introduce at least one wavelength (col. 7 lines 37-44) to the communication link (88 in fig. 6), said at least one wavelength identifying the data value (bits, col. 7 lines 39-41, col. 12 lines 36-38).

(18) With respect to Claim 21, Chow discloses the transmitter of claim 20, wherein the present of said at least one wavelength identifies the particular data value (bit state, col. 7 lines 39-41, col. 12 lines 36-38).

(19) With respect to Claim 23, Chow discloses the transmitter of claim 20, wherein said at least one wavelength comprises a wavelength identifying a bit state (col. 7 lines 39-41, col. 12 lines 36-38).

(20) With respect to Claim 24, Chow discloses the transmitter of claim 20, wherein said at least one source (44 and 46 in fig. 6) provides the signal to an optical communication link (88 in fig. 6).

(21) With respect to Claim 25, Chow discloses a system comprising:

a communication link (88 in fig. 6);

a transmitter (70 and 72 in fig. 6, 72 in fig. 11A) to provide a signal (output of 70 in fig. 6) to the communication link (88 in fig. 6) to communicate a data value (col. 14 lines 53-55) over the communication link (88 in fig. 6) and selectively introduce at least one wavelength (col. 7 lines 37-44) to the signal (output of 70 in fig. 6), said at least one wavelength identifying the data value (bits, col. 7 lines 39-41, col. 12 lines 36-38);

and a receiver (30 and 86 in fig. 6, 86 in fig. 11B) coupled to the communication link (88 in fig. 6) to detect said at least one wavelength (col. 7 lines 42-47, col. 8 lines 4-9) to identify the data value (col. 15 lines 65-67, col. 16 lines 1-6).

(22) With respect to Claim 26, Chow discloses the system of claim 25, wherein the presence of said at least one wavelength identifies the particular data value (bit state, col. 7 lines 39-41, col. 12 lines 36-38).

(23) With respect to Claim 28, Chow discloses the system of claim 25, wherein said at least one wavelength comprises a wavelength identifying a bit state (col. 7 lines 39-41, col. 12 lines 36-38).

(24) With respect to Claim 29, Chow discloses the system of claim 25, wherein the communication link comprises an optical communication link (88 in fig. 6).

(25) With respect to Claim 30, Chow discloses a system comprising:

an optical fiber (88 in fig. 6, col. 8 line 3);

a transmitter (70 and 72 in fig. 6, 72 in fig. 11A) to provide a signal (output of 70 in fig. 6) to the optical fiber (88 in fig. 6) to communicate a data value (col. 14 lines 53-55) over the optical fiber (88 in fig. 6) and selectively introduce at least one wavelength (col. 7 lines 37-44) to the signal (output of 70 in fig. 6), said at least one wavelength identifying the data value (in bits) and to indicate a particular data value (bit state) (col. 7 lines 39-41, col. 12 lines 36-38);

and a receiver (30 and 86 in fig. 6, 86 in fig. 11B) coupled to the optical fiber (88 in fig. 6, col. 8 line 3) to detect said at least one wavelength (col. 7 lines 42-47, col. 8 lines 4-9) to identify the data value (col. 15 lines 65-67, col. 16 lines 1-6).

3. Claims 1, 3, 8, 9, 15, 16, 20, 22, 25, 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Mukojima et al. (US 6,445,720).

(1) With respect to Claim 1, Mukojima discloses a method comprising:

providing a signal (outputs of 28 in fig. 3A) to a communication link (372, 376 and 374, 368 in fig. 3A and 3B) to communicate a data value (signals 450, 452, 454, 456, 458, 460 in fig. 3A) across the communication link (col. 13 lines 9-33);

and selectively introducing at least one wavelength (col. 14 lines 8-13) to the signal, said at least one wavelength identifying the data value (col. 13 lines 9-33).

(2) With respect to Claim 3, Mukojima discloses the method of claim 1, wherein said introducing comprises: introducing a wavelength identifying a byte value (digital data representing optical output level, col. 13 lines 11-15, 47-50, col. 14 lines 37-40, 45-47, 59-67).

(3) With respect to Claim 8, Mukojima discloses a method comprising: receiving a signal (inputs of 30 in fig. 3B) from a communication link (372, 376 and 374, 368 in fig. 3A and 3B), the communication link to communicate a data value (col. 13 lines 9-33);
and detecting the presence of at least one wavelength (col. 16 lines 16-33) in the signal (inputs of 30 in fig. 3B) to identify the data value (col. 15 lines 60-67, col. 16 lines 1-15).

(4) With respect to Claim 9, Mukojima discloses the method of claim 8, wherein the detecting comprises: detecting a wavelength identifying a byte value (194, col. 16 lines 16-20).

(5) With respect to Claim 15, Mukojima discloses a receiver comprising: at least one detector (194, 200, 202 in fig. 3-B) coupled to a communication link (372, 376 and 374, 368 in fig. 3A and 3B) to detect the presence of at least one wavelength (col. 17-33) in a signal received from the communication link (372, 376 and 374, 368 in fig. 3A and 3B) to identify data communicated over the communication link (col. 15 lines 7-35).

(6) With respect to Claim 16, Mukojima discloses the receiver of claim 15, wherein said at least one wavelength comprises a wavelength identifying a byte value (digital data representing optical output level, col. 15 lines 8-21, col. 16 lines 16-20).

(7) With respect to Claim 20, Mukojima discloses a transmitter comprising: at least one source to provide a signal to a communication link (372, 376 and 374, 368 in fig. 3A and 3B) to communicate a data value and selectively introduce at least one wavelength (lambda 1 or lambda 2) to the communication link, said at least one wavelength identifying the data value (col. 13 lines 9-33).

(8) With respect to Claim 22, Mukojima discloses the transmitter of claim 20, wherein said at least one wavelength comprises a wavelength identifying a byte value (digital data representing optical output level, col. 13 lines 11-15, 47-50, col. 14 lines 45-47, 59-67).

(9) With respect to Claim 25, Mukojima discloses a system comprising:
a communication link (372, 376 and 374, 368 in fig. 3A and 3B);
a transmitter (28 in fig. 3A) to provide a signal (outputs of 28 in fig. 3A) to the communication link (372, 376 and 374, 368 in fig. 3A and 3B) to communicate a data value (signals 450, 452, 454, 456, 458, 460 in fig. 3A) over the communication link and selectively introduce at least one wavelength (lambda 1 or lambda 2) to the signal, said at least one wavelength identifying the data value (col. 13 lines 9-33);
and a receiver (30 in fig. 3B) coupled to the communication link (372, 376 and 374, 368 in fig. 3A and 3B) to detect said at least one wavelength (lambda 1 or lambda 2) to identify the data value (inputs of 30 in fig. 3B) (col. 16 lines 16-35) .

(10) With respect to Claim 27, Mukojima discloses the system of claim 25, wherein said at least one wavelength comprises a wavelength identifying a byte value (digital data representing optical output level, col. 13 lines 11-15, 47-50, col. 14 lines 45-47, 59-67).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,417,944 discloses asynchronous transfer mode switch utilizing optical WDM.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Taranina whose telephone number is 571 270 1085. The examiner can normally be reached on Mon-Fri (alternative Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571 272 2600. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MT
15 Aug 2006

SHUWANG LIU
SUPERVISORY PATENT EXAMINER